

We claim:-

- 5 1. A process for the preparation of low-odor flexible polyurethane foams by reacting organic and/or modified organic polyisocyanates (a) with a polyetherol mixture (b) and, if required, further compounds (c) having hydrogen atoms reactive toward isocyanates, in the presence of water and/or other blowing agents (d), catalysts (e), flameproofing agents (f) and, if required, further assistants and additives (g), wherein the polyetherol mixture (b) consists of
- 10 b1) at least one difunctional to octafunctional polyetherol based on ethylene oxide and, if required, propylene oxide and/or butylene oxide, having an ethylene oxide content of at least 30% by weight, based on the total amount of alkylene oxide used, and an OH number of from 20 to 200 mg KOH/g, and
- 15 b2) at least one polyetherol based on propylene oxide and/or butylene oxide and, if required, ethylene oxide, having an OH number greater than 20 mg KOH/g, the ethylene oxide content being less than 30% by weight, based on the total amount of alkylene oxide used,
- 20 and the foaming is effected in an index range of less than 150, the catalyst used comprising at least one catalyst supporting the polyisocyanurate reaction.
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- 30 2. A process as claimed in claim 1, wherein the ethylene oxide content of the polyol (b1) is more than 60% by weight, based on the total amount of alkylene oxide used.
- 35 3. A process as claimed in claim 1 or 2, wherein the polyol (b1) has more than 30% of primary OH groups.
- 40 4. A process as claimed in any of claims 1 to 3, wherein the polyol (b1) is used in amounts of at least 30% by weight, based on the total weight of the component (b).
- 45 5. A process as claimed in any of claims 1 to 4, wherein the polyol (b2) is used in amounts of less than 70% by weight, based on the total weight of the component (b).

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6. A process as claimed in any of claims 1 to 5, wherein water is used as blowing agent (d) in amounts of from 1 to 10, preferably from 1 to 5, % by weight, based on the total weight of the components (b) to (g).
- 5 7. A process as claimed in any of claims 1 to 5, wherein the catalyst (e) used is an alkali metal salt and/or alkaline earth metal salt.
- 10 8. A process as claimed in any of claims 1 to 5, wherein the catalyst (e) used is potassium acetate.
9. A process as claimed in any of claims 1 to 8, wherein the flameproofing agents (f) are halogen-free.
- 15 10. A process as claimed in any of claims 1 to 9, wherein the flameproofing agents (f) used are melamine and, if required, expanded graphite.
- 20 11. A process as claimed in any of claims 1 to 10, wherein the organic and/or modified organic polyisocyanates (a) used are tolylene diisocyanate, mixtures of diphenylmethane diisocyanate isomers, mixtures of diphenylmethane diisocyanate and polyphenylpolymethylene polyisocyanate or
- 25 tolylene diisocyanate with diphenylmethane diisocyanate and/or polyphenylpolymethylene polyisocyanate.
12. A process as claimed in any of claims 1 to 10, wherein the organic and/or modified organic polyisocyanates (a) used are
- 30 NCO-containing prepolymers formed from the reaction of the isocyanates (a) with the polyetherols (b) and, if required, components (c) and/or (d).
13. A process as claimed in any of claims 1 to 12, wherein the
- 35 foaming is effected in an index range of from 50 to 150.
14. A low-odor flexible polyurethane foam, which can be prepared as claimed in any of claims 1 to 13.
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- 40 15. The use of a flexible polyurethane foam as claimed in claim 14 as carpet, upholstery, seat and packaging material and in the hygiene sector.